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TECHNICAL ASSISTANCE SERVICES FOR COMMUNITIES

Hunters Point Shipyard Superfund Site

Parcels C and UC-2 Proposed Plan Summary and Call for Public Comment

This fact sheet provides a summary of the Proposed Plan for Parcels C and UC-2 of the Hunters Point Shipyard Superfund site (HPS). This fact sheet is provided by EPA's Technical Assistance Services for Communities (TASC) program, which is implemented by independent technical and environmental consultants.

Site Description and History

The HPS is located on 866 acres on the west side of San Francisco Bay in San Francisco, California. About half of the site is on land and half is under water. The site has been used as a dock and shipyard since the late 1800s. Beginning in 1940, the U.S. Navy used the HPS for a variety of purposes, including shipbuilding; ship and submarine maintenance and repair; and decontamination, storage and disposal of radioactive and atomic weapons testing materials. Over its years of use, HPS became contaminated with a variety of hazardous substances. As a result, it was listed on the Superfund National Priorities List in 1989. The U.S. Navy is implementing the site's remediation.

The site has been divided into several parcels. Parcels C and UC-2 are 74 acres and four acres, respectively. Both parcels are located in the oldest portion of the former shipyard, which was primarily used for shipping, ship repair and office and commercial activities. There are 70 buildings located within Parcel C that were used for various purposes, including a foundry, a power plant, and manufacturing and machine shops. Parcel UC-2 includes the roads that were used to support activities at Parcel C and other areas at HPS. The U.S. Navy previously conducted removal actions to address known contamination, including the removal or cleaning of storage tanks, sandblast grit, equipment, contaminated soil, and fuel and steam lines. Contaminants above naturally occurring background levels that still remain in Parcels C and UC-2 include metals, volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and petroleum-related compounds in soil; VOCs and metals in ground water; and radiologically-impacted structures and soil.

The U.S. Navy performed a risk assessment to evaluate the potential risk to human health at Parcels C and UC-2, taking

Interested in Sharing Your Opinion?



Public comments on the Parcels C and UC-2 Proposed Plan will be accepted until Friday, February 20, 2009. Submit your written comments to:

**Keith S. Forman, U.S. Navy
BRAC Environmental Coordinator**

**By U.S. Mail: 1455 Frazee Road, Suite 900
San Diego, CA 92108-4310**

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into account the site's expected long-term uses. These uses include research and development, educational and cultural, open space, and maritime industrial uses. Once risks were calculated, the U.S. Navy developed remediation goals for chemicals that pose cancer and noncancer risks to human health. The soil risk assessment identified chemical and radiological cancer risks in various locations in Parcels C and UC-2, as well as non-cancer risks from metals in the soil. The ground water risk assessment identified cancer and non-cancer risks throughout Parcels C and UC-2 based on the potential inhalation of VOC vapors in indoor air.

Upon completion of the risk assessment, the U.S. Navy developed remedial action objectives (RAOs) designed to minimize potential risks to humans and the environment. RAOs include protection from breathing or consuming chemicals and radionuclides, protection from exposure to vapors from soil and ground water, prevention of consuming produce grown in contaminated soil, and minimization of metals migration from ground water to the San Francisco Bay.

Parcels C and UC-2 Proposed Plan Summary

The Proposed Plan for Parcels C and UC-2 outlines several remedies for contaminated soil, ground water, and radiologically-impacted structures and soil. The remedies were evaluated according to nine criteria: overall protection of human health and the environment; compliance with existing regulations; long-term effectiveness; short-term effectiveness; reduction in toxicity, mobility and volume through treatment; implementability; cost; state acceptance; and community acceptance.

For soil, the proposed remedy for Parcel C includes excavation and off-site disposal of contaminated soils to remove the sources of contamination. Soil containing VOCs in areas where extraction is not practical, such as soils beneath existing building slabs, will be left in place. Specific health and safety, construction and reuse requirements will apply to future construction-related activities that may disturb the slabs. To prevent exposure to contaminants, durable covers will be installed throughout Parcels C and UC-2 to act as physical barriers to the soil. Institutional controls (ICs) such as restrictive covenants and quitclaim deeds will also be implemented to maintain the integrity of the covers.

For More Information on EPA's TASC Program,

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Contaminated ground water at Parcels C and UC-2 will be treated by using an injected biological growth medium and zero-valent iron to destroy VOCs and immobilize metals at the source of contamination. Ground water will be monitored until remediation goals are met, which is expected to take several years. ICs implemented at the site will include restricting access to and use of contaminated ground water.

The remedy proposed for radiologically-impacted buildings, storm drains, sewers and soil in Parcel C is decontamination or, if necessary, dismantling. There are no radiologically-impacted areas in Parcel UC-2. Prior to installation of soil covers, buildings, former building sites and excavated areas will be surveyed to ensure no residual radioactivity is present above remediation goals.

Estimated Cost of the Proposed Remedial Alternatives

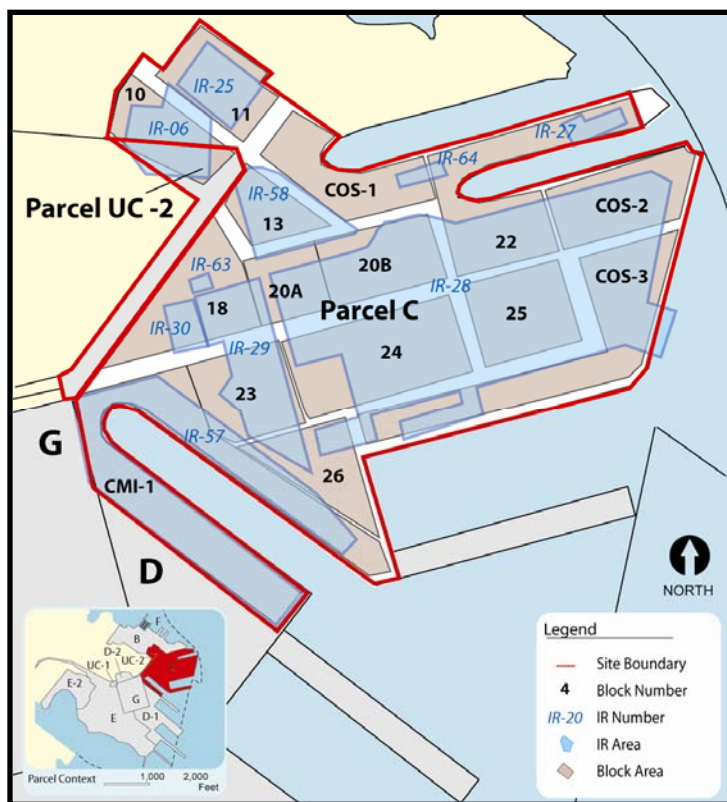
The estimated cost of the proposed remedial alternatives for soil, ground water and radiologically-impacted structures and soil is \$83 million. Table 1 shows the estimated cost for each of the contaminated media.

Table 1. Estimated Cost for Remedial Alternatives

CONTAMINATED MEDIA	PROPOSED PLAN REMEDIAL ALTERNATIVE	ESTIMATED COST
Soil	S-5	\$25 million
Ground water	GW-3B	\$28 million
Radiologically-impacted structures and soil	R-2	\$30 million
Total Estimated Cost		\$83 million

Community Comment Period

The Proposed Plan for Parcels C and UC-2 was released to the public in late January 2009 to solicit community input on the proposed remedial actions. A public meeting was held on February 4, 2009 and comments from the community will continue to be accepted until February 20, 2009.



Above: Map of Parcel C showing the redevelopment blocks and Installation Restoration (IR) areas (modified from Figures 3 and 4 of the Proposed Plan).